

ABSTRACT OF THE DISCLOSURE

A synchronization ratio S of a rotation speed of a screw, in which the position of a flight thereof does not apparently move relative to a backward speed R of the screw, is defined as 100 %. The screw is driven backward while being rotated. A rotation speed R of the screw during the backward movement is given by multiplying the rotation speed R, which is expressed by the equation, $R = \text{backward speed } V/\text{pitch } P$ of the flight, by an arbitrary synchronization ratio S_x .